



National Conference on Public Employee Retirement Systems

# NCPERS Research Series

June 2021



## The Top 10 Advantages of Maintaining Defined-Benefit Pension Plans: 2021 Update

### Introduction

Public pension funding policy is at a crossroads. Advocates make the case that public pensions should be preserved, enhanced, and expanded to those who don't have them. America is a land of vast resources and can afford to provide a dignified retirement for all through a three-pronged approach including Social Security, a DB pension, and a 401(k)-type DC savings plan.

Meanwhile, vocal opponents of public pensions would like to see defined-benefit (DB) pension plans disappear or be converted into do-it-yourself retirement savings plans such as 401(k)-type defined-contribution (DC) plans.

Attacks from foes of public pensions rest on a weak foundation. They argue that the public pension funding gap is too large. They exaggerate pension liabilities by manipulating assumptions. They compare 30-year pension liabilities with one-year state and local revenues to paint a dramatic but distorted picture. For example, a recent article in the *Chicago Tribune* argues that pension liabilities in Illinois are 10 times state and local revenues.<sup>1</sup> But when we compare 30-year pension liabilities with 30-year revenues, they are only about 8 percent of revenues. In the end they argue that taxpayers cannot afford public pensions, public pensions are unsustainable, and therefore DB plans should be converted into DC plans.

The purpose of this research series is to update the original 2011 National Conference on Public Employee Retirement Systems (NCPERS) research series and demonstrate to policy makers that DB plans are more efficient and provide greater retirement security than DC plans. (We have kept dated materials from the original series for several reasons, including examining trends, preserving specific actuarial calculations, and quotations). In addition, DB plans have a positive impact on local economies and revenue. For example, \$4.4 trillion

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<sup>1</sup> Mark Glennon, "Commentary: The Path to Illinois Pension Reform," *Chicago Tribune*, September 1, 2020, <https://www.chicagotribune.com/opinion/commentary/ct-opinion-commentary-illinois-pension-crisis-wirepoint-20200901-uyefp4ugs5awti4rfnhhrffhm-story.html>.



of investment and \$323 billion of payment in pension checks by public DB plans in 2018 contributed \$1.7 trillion to state and local economies, which in turn generated \$341 billion in state and local tax revenues. In fact, public DB plans are net revenue generators. For example, in 2018 state and local governments contributed about \$162 billion into DB pension plans and got \$341 billion in return – \$179 billion more than what they had contributed. In other words, if there were no DB plans, taxpayers would have to pay \$179 billion more to maintain the prevailing level of public services they receive.

Yet since the mid-1990s policymakers have advanced one proposal after another to replace state and local DB pension plans with DC plans. The pace of these proposals increased from 2003 to 2006, partly because of the equity market downturn in 2000 to 2002 that increased contribution rates for many DB plans, both public and private. Although the pace of DC proposals fell in 2007 to 2008, it increased again as a result of the financial market downturn in 2008 to 2009 and continues to this date. This paper discusses the top 10 advantages of maintaining DB pension plans. There is no argument about whether state and local employees should have access to DC plans – many already do in conjunction with their DB plans or through supplemental DC plans, which play a useful role in providing additional tax-deferred retirement savings.<sup>2</sup> Rather, the issue is whether DB plans should be eliminated and replaced with DC plans.

While recognizing that DC plans are useful in providing supplemental retirement benefits, this paper argues that replacing DB plans with DC plans would be short-sighted and damaging on many levels. Eliminating the DB plan and switching to a DC plan is likely to be a lose-lose situation for governments, their employees, and taxpayers. Indeed, the advantages of DB plans have become more pronounced over time. For example, in 2007 DC plans provided retirees with approximately 39 percent of the benefits derived from DB plans; by 2019, DC plans provided only about 24 percent of a DB plan's benefits.

Even if the advantages of DB plans over DC plans are becoming more pronounced, we should certainly recognize the risks associated with DB plans and take steps to mitigate those risks. We discuss how to do that in the later section “Managing DB Plan Risks.”

## Summary of the Top 10 Advantages of Retaining DB Pension Plans

- 1.** Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.
- 2.** Almost all state and local DB plans provide both disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain those additional benefits from another source, likely at a higher cost.
- 3.** DB plans enhance the ability of state and local governments to attract and retain qualified employees. Switching to a DC plan would limit that ability, possibly exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher churn rates, in turn, could lead to increased training costs and lower levels of productivity, possibly resulting in the need for a larger workforce.

<sup>2</sup> Examples of DC-type plans available to state and local employees include governmental deferred-compensation plans (also known as 457 plans) and 403(b) annuities. In addition, some state and local employees are covered by 401(k) plans, if the plans were established before May 6, 1986. According to the 2010 *Defined Contribution Plan Survey* by the National Association of Government Defined Contribution Administrators, 5.2 million state and local governmental employees (27 percent of the state and local workforce) are eligible to participate in some form of DC or deferred-compensation plan.



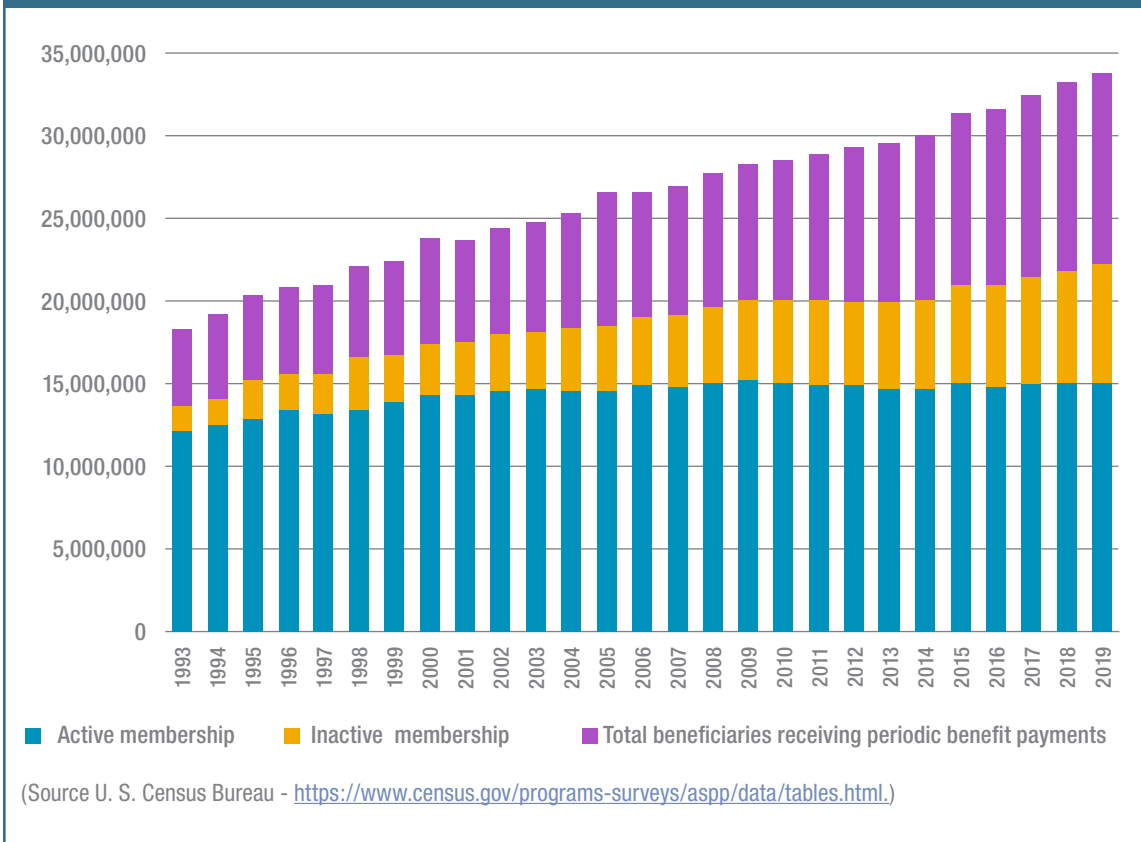
4. DB plans help state and local governments manage their workforce by providing flexible incentives that encourage employees to work longer or retire earlier, depending on the circumstances. Switching to a DC plan would limit that flexibility and make offering those incentives more expensive for the employer.
5. DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan would likely lower investment earnings and increase investment management costs, to the detriment of the plan participants.
6. DB plans reduce the overall cost of providing lifetime retirement benefits by pooling mortality and other risks over a relatively large number of participants. Switching to a DC plan would require each individual to bear such risks alone, consequently requiring higher contributions than if the risks were pooled.
7. DB plan investment earnings supplement employer contributions. Switching to a DC plan would prevent state and local governments from offsetting employer contributions with investment earnings.
8. DB plans provide secure retirement benefits that are based on a person's salary and period of service. Switching to a DC plan is likely to result in lower and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute more than half of the state and local government workforce. State and local employees who are without Social Security coverage would be subject to even greater risk.
9. DB plans help sustain state and local economies by providing sufficient and steady retirement benefits for a significant portion of the workforce. Moving to a DC plan could slow state and local economies, since a large number of retirees would receive lower retirement benefits.
10. DB plans provide benefits that help ensure an adequate standard of living throughout retirement. Substituting a DC plan would likely result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.

## Background

In 2019 state and local government retirement plans in the United States covered about 14.6 million active employees and 11.2 million retirees, including teachers, police officers, firefighters, legislators, judges, and general employees. In addition, state and local plans covered 6.9 million former employees who will be eligible to receive benefits upon reaching retirement age (i.e., “inactive” employees).<sup>3</sup> Figure 1 illustrates the trends in coverage by type of participation since 1993. It shows increases in both the total number of beneficiaries and the number of inactive participants, and demonstrates that over the last decade or so the number of active participants has been slightly decreasing or stable. These trends indicate that public plans are maturing.

<sup>3</sup> U.S. Census Bureau, Annual Survey of Public Pensions, Tables, [www.census.gov/programs-surveys/aspp/data/tables.html](http://www.census.gov/programs-surveys/aspp/data/tables.html).

### Figure 1. Participants in state and local government DB plans



Ninety-one percent of full-time state and local government employees have access to DB retirement plans. According to the latest data from the U.S. Department of Labor, 86 percent of state and local government employees participated in DB retirement plans and 37 percent in DC plans in 2019.<sup>4</sup> As Figure 2 shows, those participation rates are an improvement over 2010 when 84 percent and 29 percent were in DB and DC plans respectively. Part of the improvement relates to an increase in the number of employees who have both DB and DC plans. For example, in 2010, 13 percent of state and local government employees were in both DB and DC plans. The same figure for 2019 was 23 percent.

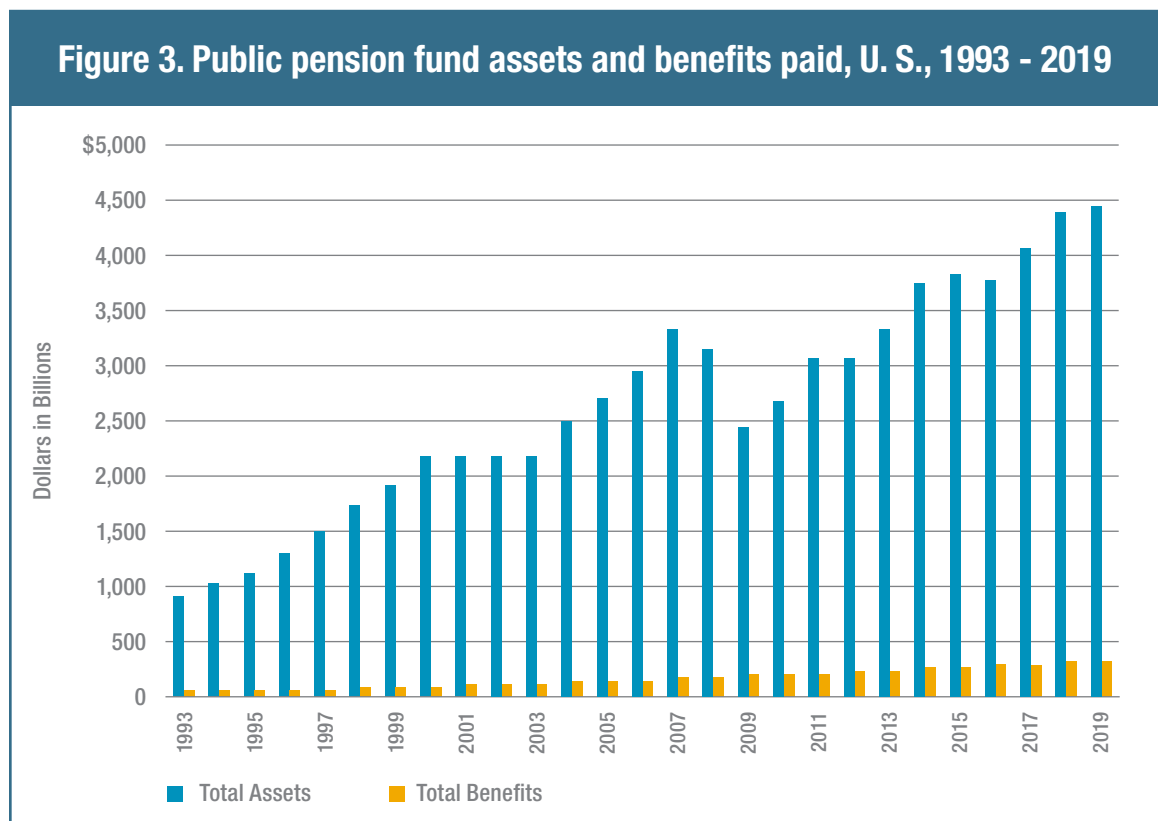
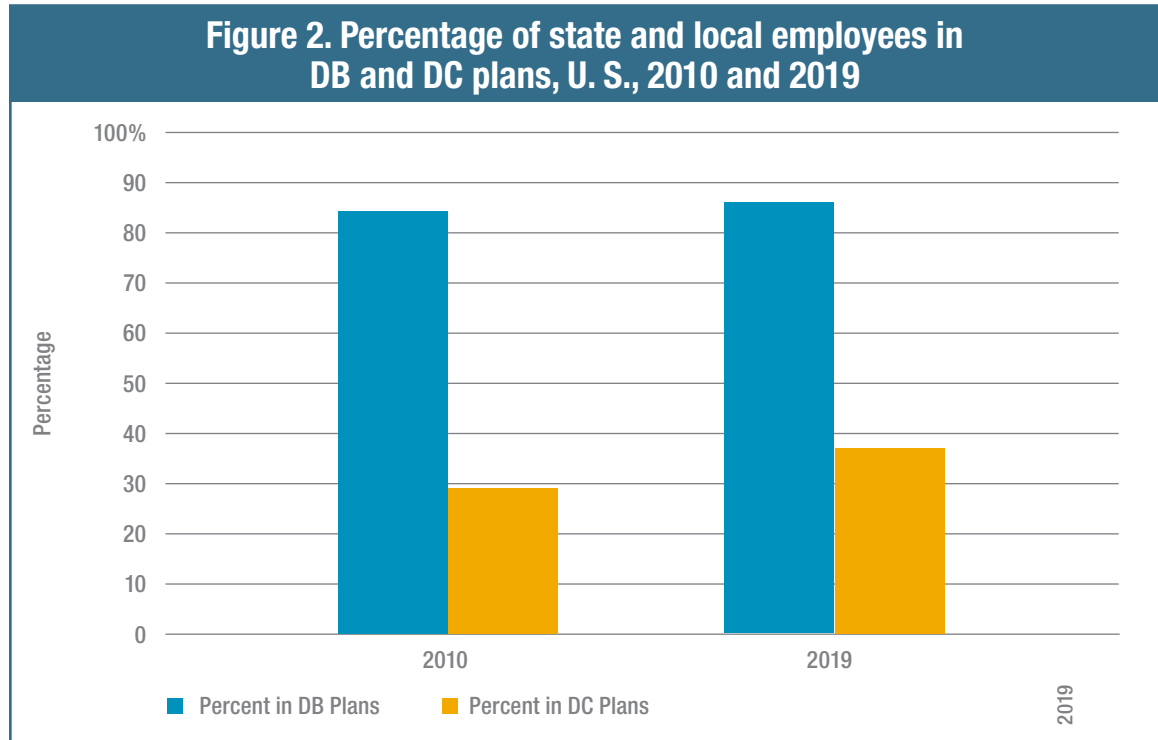
A DC plan on top of the DB plan in this situation serves as a supplemental savings plan, increasing the retirement and economic security of public employees. This is a helpful development, as about 25 percent of state and local government employees, including many public school teachers, police officers, and firefighters, are not covered by Social Security.

In 2019, state and local pension plans had \$4.4 trillion in assets; they paid \$323 billion in pension benefits to about 11.2 million retirees, averaging about \$28,741 per retiree. Figure 3 shows the trends in assets and benefits paid from 1993 through 2019.<sup>5</sup> It shows the Great

<sup>4</sup> U.S. Bureau of Labor Statistics, National Compensation Survey – Benefits, <https://data.bls.gov/cgi-bin/survey/most?nb>.

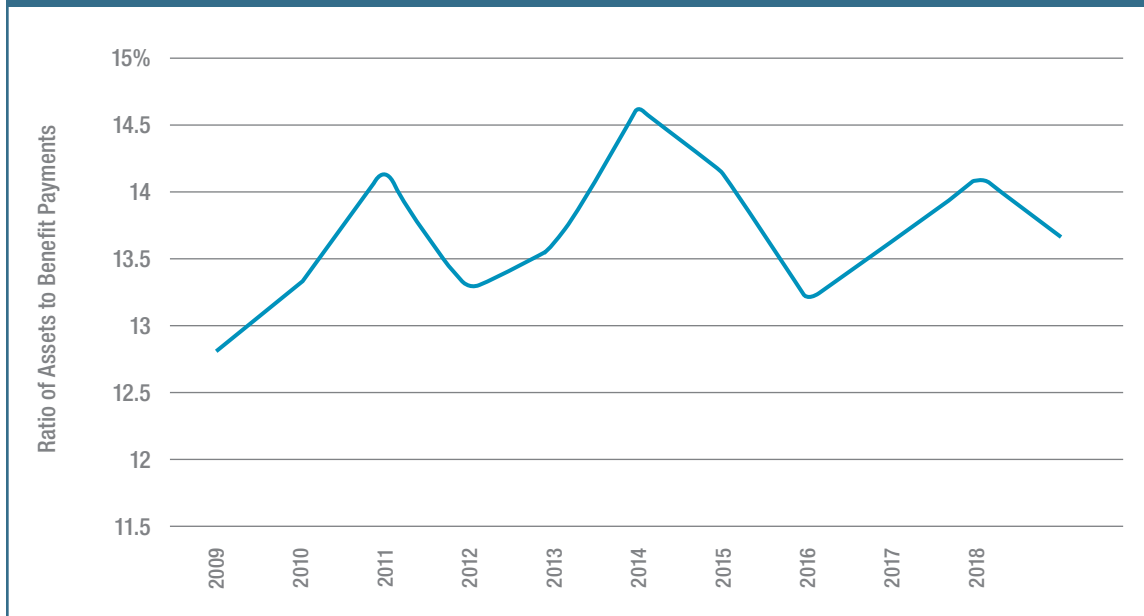
<sup>5</sup> U.S. Census Bureau, Annual Survey of Public Pensions, Tables, [www.census.gov/programs-surveys/aspp/data/tables.html](http://www.census.gov/programs-surveys/aspp/data/tables.html).

Recession's impact in 2009 when assets fell to \$2.4 trillion, from \$3.3 trillion in 2007, and when assets amounted to about 12 times the benefits paid. Since then, assets have recovered, and the assets-to-benefit-payments ratio has improved.



As Figure 4 shows, the ratio of assets to benefit payments has remained pretty stable over the last decade (mostly between 13.5 and 14.5). The average was around 14.<sup>6</sup> This ratio indicates that, on average, public pensions have enough assets to pay benefits for about 14 years, and this has been the case over the last decade. This is powerful evidence that the sky is not falling.

**Figure 4. The ratio of assets to benefit payments, U. S., 2009 - 2019**



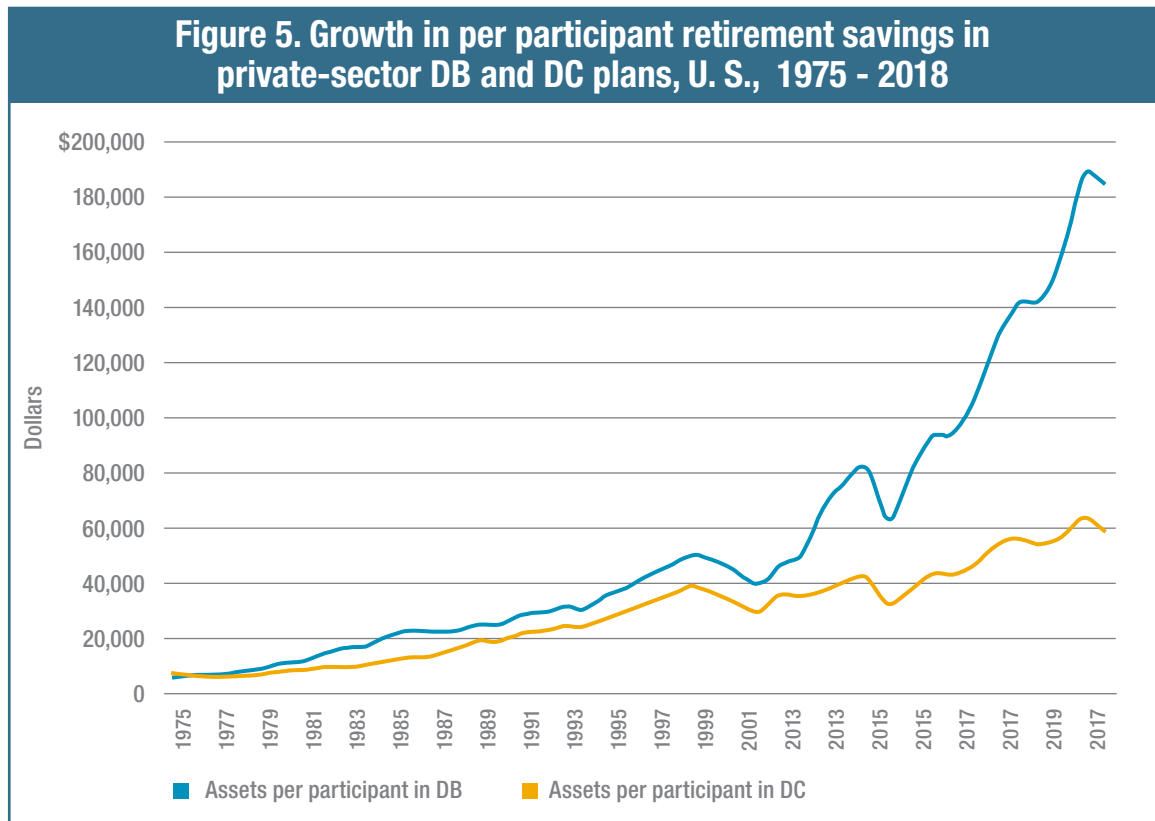
Proponents of switching to DC plans argue that doing so would lower the government's cost of providing retirement benefits, thereby reducing state and local taxes. Some proponents also argue that DC plans would benefit public employees by giving them higher benefits through the plans' investment earnings and by making it easier for employees to transfer their benefits when they change jobs. (While it is easy to transfer DC benefits as employees move, many DB plans allow pension portability through purchase of service credits.)

Common sense tells us that the reverse is true. Switching to a DC plan is likely to increase retirement costs for governments over the short term and possibly over the long term as well. This is because each employer would have to maintain the closed DB plan as well as bear the cost of a new DC plan.

In addition, studies show that retirement benefits provided through DC plans are, on average, significantly lower than benefits provided through DB plans. Figure 5 shows growth in per participant retirement assets in DB and DC plans in the private sector where there has been a significant shift from DB to DC plans since the mid-1970s. Although assets in DB plans are pooled and not isolated for each individual as in DC plans, we can estimate assets per participant for the purpose of making a comparison between asset growth per participant in DB and DC plans.

<sup>6</sup> Author's calculation.

Figure 5 shows that assets per participant in DB plans grow much faster than in DC plans. The actual data behind Figure 5 show that in 2018, the last year for which data are available, per participant assets in DB plans were about \$184,432,<sup>7</sup> whereas the same figure for DC plans was \$59,186. In other words, a DB plan provides about three times more retirement savings than a DC plan.



The shift from DB to DC plans in the private sector has created a massive retirement savings shortfall. Figure 6 shows that if there had been no shift to DC plans, retirement savings (assets) in the private sector would have totaled about \$25.7 trillion instead of the current DB plus DC savings (assets) of \$9.2 trillion – a gap of \$16 trillion.<sup>8</sup>

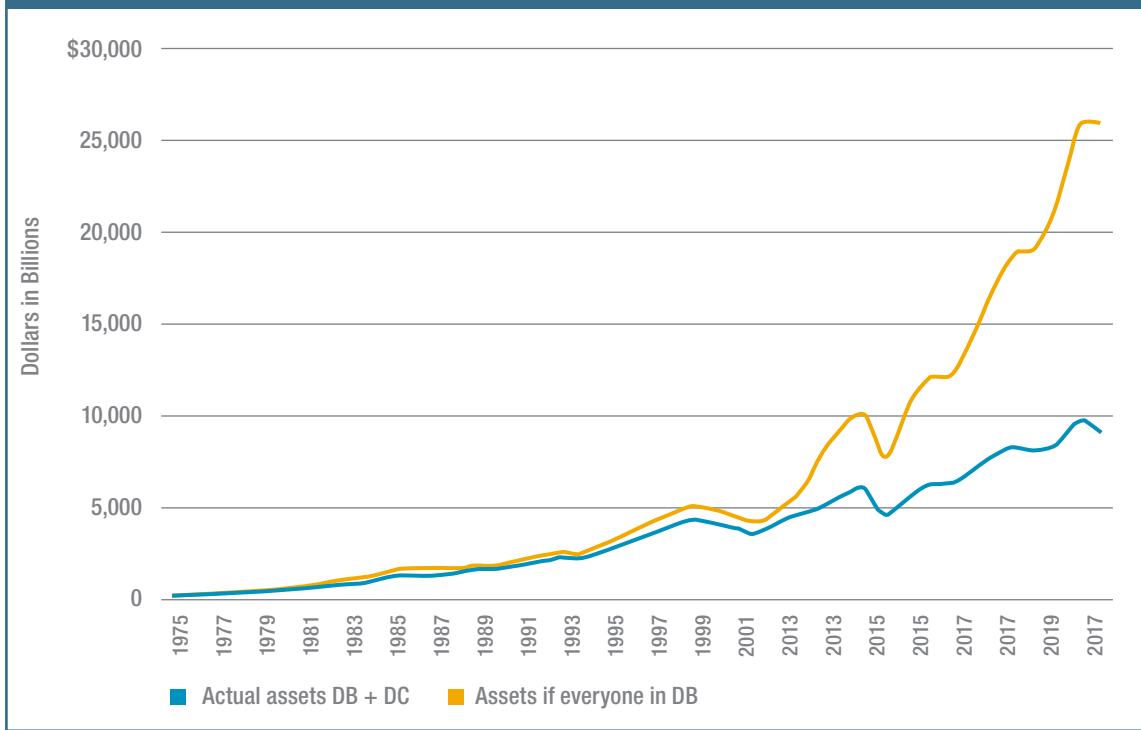
Although DC plans are useful for providing supplemental, tax-deferred retirement savings, replacing DB plans with DC plans could cause severe, unintended consequences:

- Governments could lose a valuable tool for attracting and retaining qualified employees.
- Public employees could lose a significant amount of retirement income, potentially affecting state and local economies and revenues.
- Legislators could face additional pressure to increase DC retirement benefits and provide additional financial welfare assistance for public-sector retirees.

<sup>7</sup> Employee Benefits Security Administration, U.S. Department of Labor, Private Pension Plan Bulletin Historical Tables and Graphs 1975–2018, January 2021, <https://www.dol.gov/agencies/ebsa/researchers/statistics/retirement-bulletins/private-pension-plan> - select historical tables and graphs. Actual publication at - <https://www.dol.gov/sites/dolgov/files/EBSA/researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf>.

<sup>8</sup> Author's calculations.

**Figure 6. Growth in retirement assets if there was no shift to DC plans in the private sector, U. S., 1975-2018**



## How DB Plans Work

The typical DB plan is a promise by an employer to pay retirement benefits based on a formula. A common benefit formula for state and local employees is 2 percent, times final average salary, times years of service. Under this formula, an employee who works 25 years and retires with a final average salary of \$50,000 would earn an annual benefit of \$25,000.

Eligibility for the benefit (i.e., vesting) usually requires employees to work for a minimum period, typically five years. Upon retirement, the benefit is provided as a series of monthly payments over the retiree's lifetime (and the surviving spouse's lifetime if this option is selected by the member in exchange for a reduced benefit). Most state and local employees are in DB plans that also provide cost-of-living adjustments as protection against inflation. In addition, most public plans provide disability and pre-retirement death benefits.

DB plan benefits are financed with contributions from the employer (and most often from employees as well) and investment income. Employee contributions are usually established at a fixed rate of pay, averaging 5.8 percent for employees who are covered by Social Security and 9.4 percent for employees who are not covered.<sup>9</sup> The same figures for employer contributions are 13.2 percent and 17.9 percent. Employer contributions are calculated so that over the long run (30 years or so) annual contributions plus expected investment earnings are enough to pay the promised

<sup>9</sup> NEA Collective Bargaining and Member Advocacy, *Characteristics of Large Public Education Pension Plans* (Washington, D.C.: National Education Association, January 2016), [www.nea.org/sites/default/files/2020-06/CharacteristicsLargePubEdPensionPlans2016\\_1.pdf](http://www.nea.org/sites/default/files/2020-06/CharacteristicsLargePubEdPensionPlans2016_1.pdf).





benefits plus administrative expenses. These calculations are done by actuaries and are designed to maintain employer contribution rates at a level percentage of payroll to the extent possible by smoothing short-term investment fluctuations and amortizing the unfunded liability.

Plan assets are invested in professionally managed, broadly diversified portfolios, with investment fees paid by the plan or employer. Retirement benefits are paid from accumulated contributions and investment earnings. For example, from 1993 through 2019, state and local DB plan investments earned about \$4.2 trillion, which on average amounted to about two-thirds of total plan receipts over the period, reducing the need for additional taxpayer contributions. In other words, compared with the pay-as-you-go DC scheme of paying benefits, a prefunded DB system saves taxpayers money.

A disadvantage of DB plans is that when investment earnings are lower than expected, additional employer contributions and sometimes employee contributions may be required, as evidenced by the recent market downturns. Yet over the long run DB plans are more efficient and save taxpayer money. For employees, a key advantage of DB plans is that they provide secure and predictable lifetime retirement income based on preretirement earnings and years of service. However, employees who do not remain employed long enough to become vested can lose their DB plan benefits. In instances where employees leave service before vesting, their contributions are always returned, with earnings.

## How DC Plans Work

In a DC plan, employers provide employees with individual, participant-directed investment accounts, and promise to contribute a certain amount to the accounts annually. For governmental DC plans, the employer's contributions range from 3.5 to 8 percent (or more) per year. Usually, employees are required to contribute to their accounts in order to receive an employer contribution, and decide how the assets are invested, choosing from a number of funds representing major investment categories. Investment management fees are paid from the employee's account, reducing the funds available to pay benefits. At retirement, the employee's benefit is paid solely from the contributions and investment earnings that have accumulated in the individual's account.

Employers find DC plans desirable because they lock down the employer's contribution to a fixed rate that is unaffected by downturns in investment markets. Moreover, the employer has no financial liability for the employees after they retire, even if the DC accounts are insufficient to provide an adequate retirement benefit. Although this characteristic may be an advantage for private-sector employers, it is a disadvantage for state and local governments – and taxpayers – that may have to pay increased public financial assistance as a result of the inadequate retirement benefits.

A disadvantage for employers is that providing DC plans may not be a strong incentive for attracting and retaining qualified employees, especially if competing employers are offering DB plans. Moreover, if the employees' DC account balances are inadequate to provide retirement benefits, employees may not retire. In the end, employers may have a number of active employees who are not performing at peak productivity and are effectively “retired in place.” Another disadvantage is that because the employer's contribution rate is fixed in a DC plan, upturns in the investment markets do not reduce the employer's contribution rate, as they do in DB plans.



For employees, one advantage of DC plans is that the vesting period is usually shorter than for DB plans (typically five years). In most cases, employee contributions vest immediately, and employer contributions may vest immediately or 100 percent vesting after 3 years of service. Moreover, DC accounts are more portable – that is, easier to transfer if the employee changes jobs. A major disadvantage is that DC accounts are subject to investment and longevity risks and may not be sufficient to sustain employees throughout their retirement. Another disadvantage is that a high percentage of employees cash out and spend some or all of their DC accounts, significantly reducing the amounts available to pay retirement benefits.

In the remainder of the paper we describe the 10 advantages of retaining DB plans, briefly discuss risk management strategies, and summarize conclusions.

## Advantages

### **Advantage 1: Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.**

- **Pension benefits currently promised to state and local employees and retirees are protected by law. Switching to a DC plan does not reduce the accrued DB plan benefits already earned by current employees.** Most governmental DB plan benefits are protected by the state’s constitution or statutes that prevent accrued benefits from being reduced.
- **When given the option to transfer from a DB plan to a DC plan most employees remain in the DB plan.** In some cases when new DC plans are established, current employees are given the option to transfer from the DB plan to the new DC plan. For current DB plan members who elect the DC plan, the value of the member’s accrued DB benefit is often transferred to the DC plan. However, the vast majority of public employees choose to remain in the DB plan. For example, a National Institute on Retirement Security (NIRS) study of eight states that offered a choice between the two plans found that in 2015 the DB pension takeup rate was 80 percent or higher in six of the states.<sup>10</sup>
- **Even when newly hired employees are required to join a DC plan, long-term cost savings for employers are uncertain and may take many years to be realized.** To boost the number of employees entering DC plans, some governments have restricted the DB plan to current employees and require newly hired employees to join the DC plan. However, even though new hires are prevented from choosing the DB plan, benefits continue to accrue to employees in the DB plan as a result of their service. To the extent that the DB plan’s assets amount to less than the accrued liabilities, unfunded liabilities remain. Because new hires are not entering the plan, the cost of funding the liabilities is spread over a declining number of active members. As a result the employer’s contribution rate is likely to increase as a percentage of covered payroll. In addition, since a growing portion of plan assets must be used to pay benefits, assets will be invested more conservatively and a larger share of the assets would likely be held in short-term securities, thereby reducing investment returns.

<sup>10</sup> Jennifer Erin Brown and Matt Larrabee, *Decisions, Decisions: An Update on Retirement Plan Choices for Public Employees and Employers* (Milliman and National Institute on Retirement Security, 2017), [www.nirsonline.org/reports/decisions-decisions-an-update-on-retirement-plan-choices-for-public-employees-and-employers/](http://www.nirsonline.org/reports/decisions-decisions-an-update-on-retirement-plan-choices-for-public-employees-and-employers/).



- For example, an analysis of closing the DB plan and establishing a DC plan for new hires in the case of the San Diego City Employees' Retirement System shows that the net cost to the city increased by about \$56 million.<sup>11</sup>
- **DC plans are costly to establish and maintain.** To offer a DC plan, the plan must be designed, vendors must be selected, the plan's operations must be monitored, and employees must be informed about plan features and available investments. Staff time is spent throughout this process, and the sponsoring government must pay legal and consulting fees. If a third-party administrator is not hired to operate the plan, the government must perform that task as well. Even if a third-party administrator is hired, the government will still have operating costs related to the DC plan, possibly ranging in the millions of dollars.
  - For example, the budget for the State of Florida's DC plan, established in 2000, totaled \$89 million from fiscal year 2001 through fiscal year 2004. That total included \$55 million to educate Florida's 650,000 government employees about the new plan.<sup>12</sup>
- **In several cases, states have replaced DC plans with DB plans because of the inadequacy of plan benefits, increased costs, or employee retention issues.**
  - Originally established as a DC plan in 1966, the North Dakota Public Employees Retirement System was changed to a DB plan in 1977 to provide adequate retirement benefits and to assist the state in attracting and retaining quality employees.<sup>13</sup>
  - When the State of Nebraska reviewed its two DC retirement plans for state and county workers in 2000, it found that between 1983 and 1999 the DC plans' investment returns averaged only 6 percent versus 11 percent for the state's DB plans. Recognizing that such returns were inadequate to sustain retirement benefits, the state responded by creating a new hybrid plan for state and county workers, combining both DB and DC plan features.<sup>14</sup>
  - In 2005, the West Virginia legislature passed a law allowing teachers in the Teacher's Defined Contribution (TDC) Plan (created in 1991) to transfer into the State Teachers' Retirement System, a DB plan, effective upon approval by TDC Plan members. According to the West Virginia Consolidated Public Retirement Board's actuary, the change was projected to save the state \$1.8 billion over 30 years, because the DB plan would require lower employer contributions (4.34 percent of payroll) than the DC plan (7.5 percent of payroll).<sup>15</sup> State teacher representatives also said that the change would help prevent teachers from leaving their jobs.<sup>16</sup> In 2008, more than 78 percent of TDC Plan members voted to transfer to the DB plan.<sup>17</sup>

<sup>11</sup> Presentation by Mark Hovey, executive director of San Diego CERS, at NCPERS Public Pension Funding Forum, 2017.

<sup>12</sup> Information provided by the Pension Protection Coalition based on an analysis of the Florida Public Employee Optional Retirement Program's approved budgets and revenue collections. The analysis was done for the coalition by the law firm of Olson, Hagel & Fishburn, LLP, January 18, 2005. The budgeted amounts exclude investment management fees paid by plan participants. Used with permission.

<sup>13</sup> North Dakota Legislative Council Employee Benefits Program Committee, "Public Employees Retirement Programs – History," October 1998.

<sup>14</sup> Anya Sostek, "Pension Pendulum," *Governing Magazine*, March 2004, 28.

<sup>15</sup> Justin D. Anderson, "State: Reviving Teacher Benefit Plan Will Save Money," *Wheeling News Register*, June 21, 2005.

<sup>16</sup> Jim Wallace, "Teacher Pension Bill Has Hurdles," *Charleston Daily Mail*, March 31, 2005.

<sup>17</sup> Walt Williams, "Teachers Rack Up Enough Votes to Switch Systems," *State Journal*, June 5, 2008.



- In 2012, the Palm Beach Town Council closed its existing DB plan for public safety employees and instituted a plan that combined a dramatically lower DB pension with a new DC plan. This caused a mass exodus of public safety workers. The town had 120 public safety employees in the pension plan at the end of 2011. In the next four years, 20 percent of the town's workforce and 109 public safety officers left before retirement, including 53 vested mid-career officers. In the four years before the 2012 pension changes, the number of vested mid-career officers leaving the plan was only two. The cost of all this – the high attrition, overtime pay for officers left behind, and hiring and training of new officers – went through the roof, upwards of \$20 million. In the end, in 2016 the town council reinstated the DB plan and eliminated the DC plan.<sup>18</sup>
- In 2012 Connecticut state employees who had been stuck in a DC plan were able to switch to a DB plan. They had learned that compared with their co-workers in a DB plan, they were contributing more than twice as much and were expecting to receive less than half in retirement income. One of the most effective educational tools union activists used to influence their union coalition to act was a chart that showed how much workers would have to accumulate in their DC accounts to match pensions for equivalent years of service and salary levels. With the momentum to switch to a DB plan, the coalition of 15 unions filed a grievance and won a ruling in 2010 that employees be given a choice to join the state's DB plan. It took two years for the transfers to actually begin. Collectively employees rolled over \$400 million of their DC assets into the state pension fund, to purchase credits for years of service. Four hundred former state employees with DC plan have since retired with pension incomes much greater than what they would have received had they stayed in the DC plan.<sup>19</sup>

**Advantage 2: Almost all state and local DB plans provide both disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain those additional benefits from another source, likely at a higher cost.**

- **Almost all state and local DB plans provide disability and survivor benefits.** According to the U.S. Bureau of Labor Statistics, 95 percent of full-time state and local government employees in DB plans have disability coverage through the plan, and 90 percent have the option to elect joint and survivor benefits.<sup>20</sup> These benefits are largely funded through the plan's contributions and investment earnings. Disability and survivor benefits are especially important to public safety workers, such as firefighters and police officers, who are at risk of dying or becoming disabled in the line of duty.
- **Few DC plans provide disability benefits. Moreover, DC plan survivor benefits are usually limited to payment of the participant's account balance.** In the absence of a DB plan, employers would need to obtain disability and preretirement death benefits through commercial insurance or would have to self-fund the benefits. Either of these options would likely result in additional costs. If the benefits are obtained through commercial insurance, the employer's cost would also include the insurer's profit margin.

<sup>18</sup> Presentation by Diane Oakley, executive director of National Institute on Retirement Security, at 2018 NCPERS Public Pension Funding Forum.

<sup>19</sup> James W. Russell, "How We Got Out of a 401(k) and into a Real Pension," Labor Notes, February 21, 2017, <https://labornotes.org/2017/02/how-we-got-out-401k-and-real-pension>.

<sup>20</sup> U.S. Bureau of Labor Statistics, *National Compensation Survey: Employee Benefits in State and Local Governments in the United States*, September 2007, tables 1, 16.



**Advantage 3: DB plans enhance the ability of state and local governments to attract and retain qualified employees. Switching to a DC plan would limit that ability, possibly exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher turnover rates, in turn, could lead to increased training costs and lower levels of productivity, possibly resulting in the need for a larger workforce.**

- **Employers offer retirement plans as a way to attract qualified employees and retain them so their skills and experience are used efficiently.**
  - According to Diversified Investment Advisors’ 2004 “Report on Retirement Plans,” most large employers see a tangible value in offering a DB plan to their employees. Fifty-eight percent of plan sponsors with 25,000 or more employees believe that their DB plans have a major impact on employee retention.<sup>21</sup>
  - A 2018 issue brief prepared by the Center for State and Local Government Excellence explores the effects of pension changes during 2005 to 2014 on state and local government competitiveness in attracting new workers. The pension changes during this period consisted of cutting benefits and in some cases moving new hires to DC plans. The analysis shows that pension changes hampered governments’ ability to attract new employees.<sup>22</sup>
- **DB plan provisions encourage employees to remain with an employer longer than do DC plan provisions.** The vesting period for DB plans is typically longer (e.g., five years) than the vesting period for DC plans (e.g., immediate to three years). Consequently, employees have a financial incentive to continue working for the employer at least until they become vested. After that, DB plan benefit accruals based on continued service provide an additional financial incentive to remain with the employer.
- **Key governmental service areas, such as education and public safety, require skilled and dedicated employees to work in positions involving high levels of stress or physical activity or both.** People with the skills and temperament to assume such roles usually have other opportunities in the labor market. DB plans provide strong incentives for these employees by rewarding long-term, dedicated service with a secure retirement.

**Advantage 4: DB plans help state and local governments manage their workforce by providing flexible incentives that encourage employees to work longer or retire earlier, depending on the circumstances. Switching to a DC plan would limit that flexibility and make those incentives more expensive for the employer.**

- **Governments can use DB plan benefits as a way to manage their workforce by rewarding longer employment and encouraging retirement after a certain period of employment.** DB plan benefit formulas can be structured to provide incentives for longer employment by increasing the benefit multiplier after a certain period of service. For example, to reward longer employment, the formula could provide benefits of 2.0 percent of final average earnings for the first 20 years of service and 2.2 percent for service of longer

<sup>21</sup> “Majority of U.S. Companies That Offer a Pension Plan Say It Impacts Employee Retention,” =, September 7, 2004.

<sup>22</sup> Presentation by Joshua Franzel (Center for State and Local Government Excellence) and Jean-Pierre Aubry (Center for Retirement Research at Boston College) at NCPERS Public Pension Funding Forum, 2018.



than 20 years. Moreover, to encourage retirement after a certain period of employment, the formula could limit benefit accruals to a maximum percentage of final average earnings or maximum years of service. In this example, if the benefit accrual were limited to 62 percent of final average earnings, it would encourage employees to retire after 30 years of service. Other options, such as early retirement incentives and deferred retirement option plans (DROPs), are also available.

**Advantage 5: DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan would likely lower investment earnings and increase investment management costs, to the detriment of the plan participants.**

- **On average, investment returns for DC plans are lower than for DB plans, resulting in significantly lower investment earnings over a person’s lifetime.** According to a recent Towers Watson study, DB plans outperformed DC plans by one percentage point (i.e., 100 basis points [bps]) annually, on average, between 1995 and 2007 and likely through 2008.<sup>23</sup> For a person contributing \$5,000 to a DC plan each year for 40 years, the difference between an 8 percent annual return and a 7 percent return amounts to a loss of more than \$330,857. Other studies show that nonprofessional investors may underperform the market by 1.8 percent annually.<sup>24</sup> The difference between an 8 percent annual return and a 6.2 percent return amounts to a loss of more than \$534,638. A 2015 study by the Center for Retirement Research at Boston College showed that weighted (by size of the plan) returns for DB plans during 2003 to 2012 were about 1.4 percent higher than those of DC plans.<sup>25</sup>
- **Administrative and investment costs for DC plans can be more than four times higher than for DB plans. In DC plans, such costs are borne directly by individual plan participants through deductions from their DC accounts.** According to the Investment Management Institute, the operating expense ratio for DB plans averaged 31 bps in 2003 (31 cents per \$100 of assets) compared with 96 to 175 bps for DC plans.<sup>26</sup> Additionally, a Boston College study reported asset management fees averaging 25 bps for DB plans, compared with 60 to 170 bps for DC plans, depending on plan size and the mix of investments.<sup>27</sup> According to the Illinois Municipal Retirement Fund, the total annual administrative and investment cost for its DB plan amounted to 44 bps in 1999. If the fund had switched to a DC plan, total annual administrative and investment costs could have increased up to 225 bps, or up to \$250 million, more than the annual administrative and investment costs paid by the DB plan.<sup>28</sup>

<sup>23</sup> Towers Watson, *Defined Benefit vs. 401(k) Investment Returns: The 2006–2008 Update* (December 2009).

<sup>24</sup> Chris Flynn and Hubert Lum, *DC Plans Under Performed DB Funds* (Toronto: CEM Benchmarking, 2006).

<sup>25</sup> Alicia H. Munnell, Jean-Pierre Aubry, and Caroline V. Crawford, *Investment Returns: Defined Benefit vs. Defined Contribution Plans* (Chestnut Hill, Mass.: Center for Retirement Research at Boston College, 2015), <https://crr.bc.edu/briefs/investment-returns-defined-benefit-vs-defined-contribution-plans/>.

<sup>26</sup> Sean Collins, “The Expenses of Defined Benefit Pension Plans and Mutual Funds,” *Perspective* 9, no. 6 (December 2003). DC plan expenses include 12-bp marketing and distribution fees.

<sup>27</sup> Alicia H. Munnell and M. Soto, *State and Local Pension Plans Are Different from Private Plans* (Chestnut Hill, Mass.: Center for Retirement Research at Boston College, 2007).

<sup>28</sup> Louis W. Kosiba, “The Defined Benefit vs. Defined Contribution Debate: The \$250 Million Question,” Illinois Municipal Retirement Fund, October 13, 1999, p. 2.



- **Employees direct their own investments in a DC plan, usually selecting from among several funds that reflect major investment categories. Generally, employees have limited investment experience or training.** According to Towers Watson, many DC plan participants “don’t start saving soon enough, don’t save enough, and don’t follow sound investment principles in managing their retirement assets.” The study also found that assets are more effectively managed in DB plans, in part because plan administrators work with consultants and professional asset managers to set and implement investment goals.<sup>29</sup>
- **DC plan participants often cash out and spend some or all of their DC accounts when they switch jobs. As a result, the accounts have less money to earn investment returns and to pay benefits at retirement.** According to Alicia Munnell at the Center for Retirement Research at Boston College, a high percentage – about 45 percent in 2004 – of employees in DC plans cash out or spend some or all of their DC accounts when they change jobs, significantly reducing the amounts available to pay retirement benefits.<sup>30</sup> Although the percentage of people cashing out their DC plan assets has declined since 2004, in 2020 14 percent had cashed out their DC plan assets and another 13 percent said they intended to cash out all or part of their DC savings.<sup>31</sup>

**Advantage 6: DB plans reduce the overall cost of providing lifetime retirement benefits by pooling mortality (and other) risks over a relatively large number of participants. Switching to a DC plan would require each individual to bear such risks alone, consequently requiring higher contributions than if the risks were pooled.**

- **DC plan participants must save enough to ensure that they will not outlive their accumulated assets while protecting their investments against financial market fluctuations.** According to the Society of Actuaries RP-2000 mortality tables, 50 percent of U.S. males who reach age 65 will live to age 83, 10 percent will live to age 93, and about 1 percent will live to 100. Moreover, 50 percent of U.S. females who reach age 65 will live to age 85, 10 percent will live to age 96, and 2 percent will live to 100. To ensure that their DC accounts will sustain them over their expected lifetimes, DC plan participants must save enough so that their benefits will be paid into their 90s.
  - For example, a 25-year-old male would have to save 17 percent of his salary each year to age 65 in order to replace 75 percent of his preretirement income from age 65 to age 93 (assuming 7 percent annual investment returns). A 25-year-old female would have to save 18 percent of her salary to ensure 75 percent income replacement to age 96. However, if these longevity risks were pooled over a large enough group to allow the risks to be fully averaged, the required savings rate would fall to 13.6 percent of salary for both males and females.<sup>32</sup> Risk pooling is one of the main advantages of a DB plan.

<sup>29</sup> Watson Wyatt Worldwide, *Pension Aspirations and Realizations: A Perspective on Yesterday, Today, and Tomorrow* (March 2007).

<sup>30</sup> Alicia H. Munnell and Annika Sunden, *401(k) Plans Are Still Coming Up Short* (Chestnut Hill, Mass.: Center for Retirement Research at Boston College, 2006), [https://crr.bc.edu/wp-content/uploads/2006/03/ib\\_43\\_508rev.pdf](https://crr.bc.edu/wp-content/uploads/2006/03/ib_43_508rev.pdf).

<sup>31</sup> Megan Leonhardt, “14% of Americans with Retirement Savings, Both Working and Unemployed, Have Already Tapped into Those Funds,” CNBC Make It, May 27, 2020, [www.cnbc.com/2020/05/27/14-percent-of-americans-with-retirement-savings-have-tapped-into-funds.html#:~:text=About%2014%25%20of%20those%20with,use%20of%20their%20retirement%20funds](https://www.cnbc.com/2020/05/27/14-percent-of-americans-with-retirement-savings-have-tapped-into-funds.html#:~:text=About%2014%25%20of%20those%20with,use%20of%20their%20retirement%20funds).

<sup>32</sup> Gabriel, Roeder, Smith & Company, “The Advantages of Risk Pooling for Financing Retirement Benefits,” *GRS Insight*, July 2006.



- In addition, to lower their investment risk, DC plan participants usually shift a greater portion of their assets from stocks into bonds as they grow older. Although doing so helps protect against equity market downturns, it also reduces likely investment return.** According to a 2008 Employee Benefit Research Institute study, over the 10-year period ending in 2008, 401(k) plan participants in their 30s invested an average of 64 percent of their account balances in equities (including company stock) and 21 percent in bonds, the money market, and stable value securities. Participants in their 60s invested 37 percent in equities and 48 percent in bonds, the money market, and stable value securities.<sup>33</sup> In contrast, large public retirement systems hold 52 percent of assets in equities, 29 percent in fixed-income securities, 6 percent in real estate, and the remaining 12 percent in alternative and other investments.<sup>34</sup> This pooling of assets allows DB plans to maintain a more diversified portfolio and helps improve their investment returns.
- By pooling longevity risks and earning higher investment returns, DB plans lower the total costs of providing retirement benefits.** Instead of requiring contributions large enough to fund retirement benefits through each individual's maximum life expectancy, DB plans need to fund benefits only through the average life expectancy of the group. Moreover, by earning higher investment returns over a longer period, DB plans can reduce required contributions. Pooling saves money. In the example related to mortality pooling presented earlier in this section, if investment returns increased by 1 percent, the required contributions for the pooled participants would fall from 13.6 to 10.0 percent.<sup>35</sup>

#### **Advantage 7: DB plan investment earnings supplement employer contributions. Switching to a DC plan would prevent state and local governments from offsetting employer contributions with investment earnings.**

- Most of the money paid into state and local retirement plans comes from investment earnings.** Over the past quarter-century period from 1993 through 2019, state and local government investment earnings amounted to \$4.6 trillion, compared with employer contributions of \$2.5 trillion and employee contributions of \$960 billion. In other words, on average, about 60 percent of revenues coming into state and local pension funds during that period came from investment earnings; some data place this figure even higher. Of course, the portion of money coming into pension funds from investment earnings varies each year depending on market ups and downs. For example, during the last quarter century, the portion of money coming from investment earnings was between 75 and 80 percent for half the time. During the same period, 1993 through 2019, money coming from investment earnings was negative in 2002, 2008, and 2009.

According to a paper on state and local retirement plans prepared for the Wharton School's Pension Research Council, "Setting aside all the other benefits to employers and employees of DB plans, contributions to public pension plans may be among the best investments a state or local government can make."<sup>36</sup>

<sup>33</sup> Jack VanDerhei, Sara Holden, and Luis Alonso, *401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2008*, EBRI Issue Brief 335 (Washington, D.C.: Employee Benefit Research Institute, October 2009).

<sup>34</sup> Keith Brainard, *Public Fund Survey Summary of Findings for FY 2009* (National Association of State Retirement Administrators, 2010), 10.

<sup>35</sup> Gabriel, Roeder, Smith & Company, "The Advantages of Risk Pooling."

<sup>36</sup> Gary W. Anderson and Keith Brainard, *Profitable Prudence: The Case for Public Employer Defined Benefit Plans* (Philadelphia: Pension Research Council, Wharton School, University of Pennsylvania, 2004), 14.





**Advantage 8: DB plans provide secure retirement benefits that are based on a person's salary and period of service. Switching to a DC plan is likely to result in smaller and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute more than half of the state and local government workforce. State and local employees who are without Social Security coverage would be subject to even greater risk.**

- **Retirement benefits paid from DC plans are significantly less than benefits paid from DB plans.**

A 2007 study by the US Congressional Research Service showed that older workers would have received annual benefits of approximately \$8,400 from DC-type plans upon retirement—about 39 percent of the \$21,595 that DB plans would have provided in 2007.

The gap between the annual benefit from a DC plan versus a DB plan has increased since that study. For example, data from Vanguard indicate that the average 401(k) balance in 2019 was about \$92,000.<sup>37</sup> This would provide an annual benefit of \$7,030 for a 20-year annuity at a 5 percent rate of return. Compare that with a \$28,741 average annual lifetime pension from state and local pension plans in 2019. The annual benefit from a DC plan in 2019 is 24 percent of that provided by the DB plan, down from more than one-third in 2007 – a decline of about 15 percent.

- **If average state and local retirement benefits fell from \$28,741 to \$7,030, it would mean a loss of approximately \$243 billion in annual retirement income.** Retirees spend their pensions in the local economy. The loss of \$243 billion in spending would be felt by state and local economies, since many retirees remain in the same location when they retire. In most cases these pension benefits are also subject to federal and state income taxes, thus resulting in a loss of tax revenues. Tax losses would also be seen in reductions of state sales tax revenues.

- **Switching to a DC plan would have an even greater effect on the 25 percent of state and local government employees who are not covered by Social Security, including school employees, police officers, and firefighters.** When first enacted in 1935, Social Security excluded state and local employees, due largely to constitutional concerns about the federal government's right to tax state and local governments. In 1950, Congress amended the Social Security Act to allow state and local governments to voluntarily elect coverage. By then, however, half of the largest state and local plans – including many plans for teachers and public safety workers – had already been established. Those DB plans provide benefits that compensate for the lack of Social Security coverage. Replacing them with DC plans would put these members at even greater risk, since they are not eligible to receive Social Security benefits.

<sup>37</sup> Liz Knueven, "The Average 401(k) Balance by Age, Income Level, Gender, and Industry," Business Insider, Personal Finance, July 20, 2020, [www.businessinsider.com/personal-finance/average-401k-balance](https://www.businessinsider.com/personal-finance/average-401k-balance).



**Advantage 9: DB plans help sustain state and local economies by providing sufficient and steady retirement benefits for a significant portion of the workforce. Switching to a DC plan could slow state and local economies, since a large number of retirees would receive lower retirement benefits.**

- **Public DB plans have a substantial impact on state and local economies.** In essence, state and local retirement plans act as financial engines, using employer and employee contributions to generate investment income that, when paid as retirement benefits, bolsters state and local economies. State and local retirees purchase a wide range of goods and services with their retirement income. These purchases, in turn, promote employment and create additional economic demand, generating additional economic activity. On top of retiree spending, state and local economies grow through investment of public pension assets. While pension funds invest globally, the positive impact can be traced back to individual states and localities.<sup>38</sup>
  - A 2009 NIRS study found that in 2006, the \$151 billion in retirement benefits paid nationally to 7.3 million retired state and local government employees supported \$358 billion in total economic output, including employment for more than 2.5 million Americans. As a result, for every \$1 paid out in pension benefits, \$2.37 worth of economic activity was supported. The study also found that every \$1 contributed by employers (i.e., taxpayers) to the pension funds (and invested) supported \$11.45 in total economic activity.<sup>39</sup>
  - The 2021 update of the NIRS study shows that about \$309 billion paid to some 11 million state and local government retirees generated \$675 billion in economic output, including jobs for 3.6 million Americans. The total impact of public and private DB plans on the U.S. economy was about \$1.3 trillion.<sup>40</sup>
  - A recent NCPERS study shows a much bigger impact. The study takes into account the impact of both investments of pension fund assets and spending of pension checks by retirees. It focuses on state and local pension plans and looks at the impact on the economy and revenues. It found that state and local pension plans contributed \$1.7 trillion to the U.S. economy, which in turn generated \$341 billion in state and local tax revenues. The study underscores that public pensions are revenue positive – they generated \$179 billion more than taxpayer contribution.<sup>41</sup>

Spending of DC plan distributions and investment of DC assets also have a positive effect on the economy, but the shift from DB to DC plans exacerbates income inequality that in turn drags the economy down. In the end the positive economic impact of DC plans is mitigated by the negative economic impact of rising income inequality.<sup>42</sup>

<sup>38</sup> NCPERS, *Unintended Consequences: How Scaling Back Public Pensions Puts Government Revenues at Risk, 2020 Update* (Washington, D.C.: NCPERS, May 2020), [www.ncpers.org/files/NCPERS%20Unintended%20Consequences\\_2020\\_Update\\_WEB\\_FINAL.pdf](http://www.ncpers.org/files/NCPERS%20Unintended%20Consequences_2020_Update_WEB_FINAL.pdf).

<sup>39</sup> Ilana Boivie and Beth Almeida, *Pensionomics: Measuring the Economic Impact of State and Local Pension Plans* (Washington, D.C.: National Institute on Retirement Security, February 2009).

<sup>40</sup> Ilana Boivie and Dan Doonan, *Pensionomics 2021: Measuring the Economic Impact of DB Pension Expenditures* (Washington, D.C.: National Institute on Retirement Security, January 2021), [www.nirsonline.org/wp-content/uploads/2020/12/Pensionomics-2021-Report-Final-V6.pdf](http://www.nirsonline.org/wp-content/uploads/2020/12/Pensionomics-2021-Report-Final-V6.pdf).

<sup>41</sup> NCPERS, *Unintended Consequences*.

<sup>42</sup> NCPERS, *Income Inequality: Hidden Economic Cost of Prevailing Approaches to Pension Reforms* (Washington, D.C.: NCPERS, 2015), [https://www.ncpers.org/files/NCPERS%20Income%20Inequality%20Paper\\_Web\(1\).pdf](https://www.ncpers.org/files/NCPERS%20Income%20Inequality%20Paper_Web(1).pdf).



**Advantage 10: DB plans provide benefits that help ensure an adequate standard of living throughout retirement. Switching to a DC plan would likely result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.**

- **If DC plan benefits are insufficient to ensure an adequate standard of living during retirement, state and local governments, legislators, and taxpayers will bear continued pressure as retirees outlive their retirement income.** Since DC benefits are not indexed to inflation, extended periods of even modest inflation will mean continuing long-term pressure for additional financial support for retirees, who would make up a growing portion of the electorate. If DC plan benefit improvements were granted, they would be paid from current government revenues and would not be offset by investment earnings.

According to NIRS, public- and private-sector DB plans “play a vital role in reducing the risk of poverty and material hardship among older Americans.”<sup>43</sup> In a 2009 study of financial hardship among the elderly, NIRS found that

- rates of poverty among older Americans without DB plans were six times greater than for those with DB plans;
- older households with DB plans were far less likely to experience food, shelter, or healthcare hardships; and
- DB plans resulted in savings of about \$7.3 billion in public assistance in 2006 (approximately 8.5 percent of aggregate public assistance received that year by American households).

Our analysis of historical data from the U.S. Bureau of Labor Statistics and the U.S. Census Bureau shows that an increase in DC plan participation simultaneously increased poverty among people aged 65 and up and state and local expenditures on welfare. For example, from 1980 to 2017, participation in DC plans increased from 20 million to 102 million – an increase of 400 percent. During the same period poverty among people aged 65-plus increased from 3.8 million to 4.7 million – an increase of about 24 percent – and state and local expenditures on poverty-related welfare programs increased from \$45 billion to \$678 billion – an increase of 1,390 percent. Although these trends are not a cause and effect, they reflect that a shift to DC plans is correlated with poverty among the elderly and a higher cost of public assistance.

### **Managing DB Plan Risks**

The financial market declines from 2000 to 2002 and 2008 to 2009 have had a major impact on the funding of state and local government pension plans and have caused many governments to reevaluate their plan designs. Although DB plans have many advantages over DC plans, it is also important to recognize and manage the risks associated with DB plans. A full discussion

<sup>43</sup> Frank Porell and Beth Almeida, *The Pension Factor: Assessing the Role of Defined Benefit Plans in Reducing Elder Hardships* (Washington, D.C.: National Institute on Retirement Security, July 2009), 1.

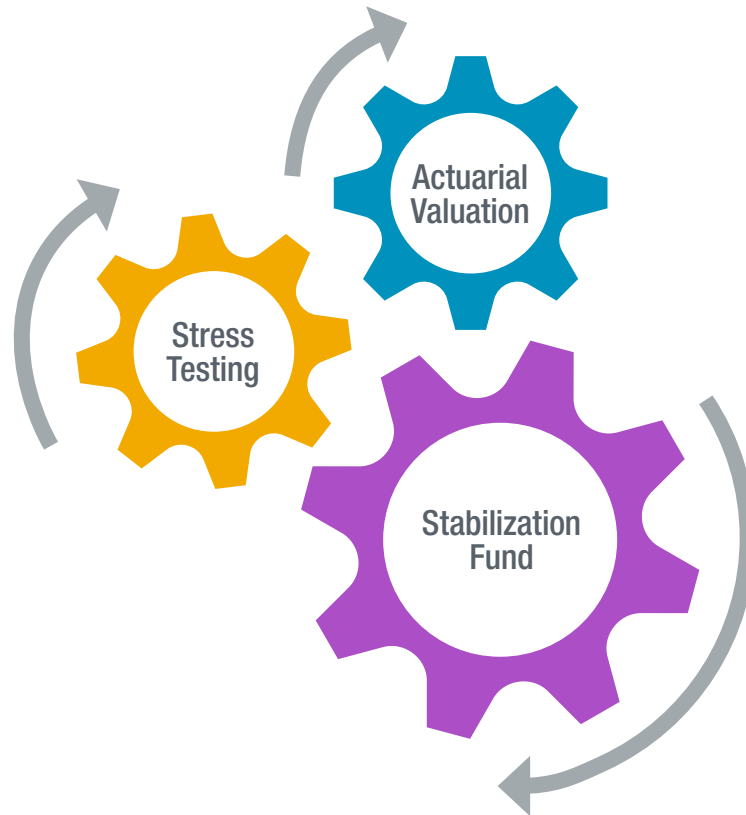


of the actions needed to manage DB plan risks is beyond the scope of this paper; however, a few key steps are discussed here.

- **Examine portfolio allocations in light of downside risks.** Probably the largest single risk facing DB plans is investment volatility, as demonstrated by the market declines over the past decade. Asset allocations should be made with an understanding of the downside risks facing the portfolio and the techniques available to manage them. For example, one strategy to manage risk might be to match asset allocation with plan demographics.
- **Contribute the actuarially determined amounts to fund the plan.** As the recent recession demonstrates, making the necessary contributions can be especially difficult in times of intense fiscal pressure. However, contributing less than the actuarially determined contribution means that the amounts not contributed must be repaid in the future with interest (at the expected rate of return – e.g., at 6 percent to 8 percent). Consequently, chronic patterns of contributing less than the actuarially determined amount will make it increasingly difficult to pay the necessary contributions in the future and diminish the benefit security of plan members.
- **Apart from actuarial valuation, conduct stress testing.** Regular actuarial valuation is necessary to ascertain whether funding progress is on track to pay the promised benefits. On top of that, pension plans may do stress testing every few years. Stress testing is a way to measure the risk of a financial system’s capacity to meet (or not meet) its future obligations as a result of economic shocks. Actuarial valuation looks at the plan in a rearview mirror and makes determinations about required contributions and adjustments to meet future pension obligations. A stress test is based on a forecast of different economic scenarios. It’s just like forecasting where the eye of a hurricane will hit the coast considering various factors, such as weather conditions along the way. Stress testing is unlikely to offer pinpoint accuracy because scenarios are simply possibilities, but it is a valuable tool for making better decisions and anticipating risks.
- **Stabilize pension liabilities and economic capacity.** New research shows that as long as the ratio between pension liabilities and the plan sponsor’s economic capacity (GDP) is stable, pension funds can be sustained.<sup>44</sup> Of course that ratio can fluctuate with economic ups and downs. The amount required to keep the ratio stable can be put in a stabilization fund that the sponsor can draw upon to stabilize the ratio. As Figure 7 shows, such a stabilization fund amounts to an extra layer of protection on top of actuarial valuation and stress testing to ensure sustainability of public pensions in the face of various risks.

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<sup>44</sup> Jamie Lenney (Bank of England), Byron Lutz (Federal Reserve Board of Governors), and Louise Sheiner (Brookings Institution), *The Sustainability of State and Local Government Pensions: A Public Finance Approach* (Washington, D.C.: Brookings Institution, July 14, 2019).

**Figure 7. Sustainability of public pensions**

To further ensure the long-term health of public pensions, state and local governments need to reform their revenue structures. Even if the ratio between pension liabilities and the economy is stable, in some states revenues may not grow in sync with the economy. State and local governments need to better align their revenues with their economy. A good revenue system should grow in good economic times and should be stable in economic downturns.



## Conclusion

This paper addresses the question, *Should state and local government defined-benefit plans be eliminated and replaced with defined-contribution plans?* It concludes that such a move would have significant, long-term, detrimental effects on state and local governments, their employees, and ultimately the taxpayers.

It also concludes that the positive effects of DB plans have become more pronounced since the original 2011 NCPERS study examining the advantages of DB plans. For example, the gap between benefits provided through DB plans versus DC plans has increased. DC plan benefits in 2007 were about 39 percent of the benefits provided through DB plans. In 2019 DC plan benefits were about 24 percent of benefits provided through DB plans.

There have been other positive developments in the retirement security arena and the resilience of public pensions to pay promised benefits despite the Great Recession. For example:

- The latest data from the U.S. Department of Labor show that 86 percent of state and local government employees are participating in DB retirement plans and 37 percent in DC plans. That is an improvement over 2010 participation rates, which were 84 percent and 29 percent for DB and DC plans respectively. Part of the improvement stems from increasing numbers of employees who have both DB and DC plans. For example, in 2010, 13 percent of state and local government employees were enrolled in both DB and DC plans. The same figure for 2019 was 23 percent – a 10 percent increase.
- The ratio of assets to benefit payments during the last decade has remained pretty stable, around 14 on average. That ratio indicates that public pensions have enough assets to pay benefits for about 14 years. In other words, the sky is not falling.

In the final analysis, the real question is, *How can state and local governments efficiently provide secure, sufficient, and sustainable retirement benefits for their employees?* The answer is that state and local governments need to stabilize pension liabilities through funding their plans without skipping contributions. They should conduct actuarial valuation annually and stress test every few years. On top of that they should establish stabilization funds to make sure that the ratio between pension liabilities and economic capacity is stable. Above all, state and local governments need to bring their state and local revenue systems in sync with their economies.





**National Conference on Public Employee Retirement Systems**

1201 New York Avenue, NW • Suite 850 • Washington, DC 20005 • 202-601-2445 • FAX: 202-688-2387 • [info@NCPERS.org](mailto:info@NCPERS.org)